

WhatsApp-Driven Google Drive Assistant (n8n Workflow)

Overview

This project implements Task 2 of the internship challenge: a fully automated **Google Drive Assistant controlled via WhatsApp messages**. Built using **n8n**, the system uses **Twilio Sandbox for WhatsApp** to receive commands and performs actions on the user's Google Drive.

No AI summarization is used in this version to avoid external API key requirements. Instead, all logs and command responses are managed using **Google Sheets** for visibility.

Features

- WhatsApp-based command interface using Twilio
 - OAuth2-authenticated Google Drive integration
 - Supports:
 - LIST /FolderName
 - DELETE /FolderName/file.pdf
 - MOVE /Source/file.pdf /Target
 - SUMMARY /FolderName (returns filenames only)
 - Google Sheet log for all actions
 - Ready-to-import n8n workflow.json
-

Requirements

- Twilio Account with Sandbox for WhatsApp
 - n8n instance (local or cloud)
 - Google Cloud project with Drive API + OAuth2 credentials
 - Google Sheet for logs
-

Setup Instructions

1. Twilio WhatsApp Sandbox

- Go to [Twilio Sandbox for WhatsApp](#)
- Activate and note the phone number & keyword
- Set the Webhook URL in Twilio to the **n8n Webhook Trigger URL**

2. Google OAuth2 Credentials

- Enable Google Drive API at <https://console.cloud.google.com/>
- Create OAuth2 credentials
- Add them to Google Drive and Google Sheets credentials in n8n

3. Google Sheet for Logging

Create a Google Sheet with the following headers:

Timestamp | Command | Status | Message

Share it with your service account email (if using service account) or connect via OAuth2 in n8n

How It Works

1. User sends WhatsApp message: e.g., LIST /Invoices
2. Twilio hits n8n webhook
3. n8n parses command and executes the relevant Drive action
4. n8n sends success/failure message back to WhatsApp
5. Log is appended to Google Sheet

File: workflow.json

The provided file includes:

- Webhook trigger
- Parse step to break down message text
- Switch node to detect command type
- Google Drive action nodes (list, delete, move)
- Google Sheets log node
- HTTP Request to Twilio for WhatsApp reply

Example Commands

LIST /Documents

DELETE /Invoices/old.pdf

MOVE /Reports/file.pdf /Archives

SUMMARY /Presentations

Sample .env (Optional)

```
TWILIO_ACCOUNT_SID=...
```

```
TWILIO_AUTH_TOKEN=...
```

```
TWILIO_WHATSAPP_FROM=whatsapp:+14155238886
```

```
TWILIO_WHATSAPP_TO=whatsapp:+91xxxxxxxxxx
```

Use these with environment variables in n8n or hardcode inside HTTP Request node for testing.

License

MIT License — Free to modify and deploy.

Note

This version avoids AI integration to reduce setup friction. Summary command currently returns **file names only**. Future upgrades could plug in GPT or Claude for document summarization.

Happy automating!